

Cyclin D2 promoter, MSP primers
 Accn. No. U47284 Promoter region analyzed: -1616 to -1394 bp

1 gagctCGagc CGccatgc CGcttgca CG tgccagcttg CGcagcacat cagggCGctg
 61 gtctctccc ttctctctg agtgaatac accaaaggC CGgtggggg tggggggtga
 121 CGggaggaag gaggtgaaga aaCGccacca gatCGtatct cctgtaaga cagccttgac
 181 tcaaggatC Gttagag Cac Gtgtacggc CG Cctgtg ggCGacttc acCGcagtCG
 241 gctccccagg agaaagcctg gcagagtga gCGCGaaac GgaggtCG CGaggtatgCG
 301 ggCGaaggac CGagCGtgga ggcctcatgc ctCCGgggaa aggaagggtt ggtggtgtt
 361 gCGcaggggg agCGaggggg agCGgacct aatccctcac tCGccccctc cccctccCGg
 421 gccatttct agaaagctgc atCGgtgtg ccaCGctcag CGagagacc CGggCGgct
 481 tgtcagcaga tgcagggggCG aggaagCGg ttttctctG GtggcCGctg ggCGggggaa
 541 CGcttggtgag cctgccccC GgcctgCGC GgcctagaC GatgcacCGC GtCGccccac
 601 gggccccCGaa gagccccag aaacaCGatg gttctgctC Gaggtacaca ttctatccct
 661 ccagagaagc accccccctt cttoctaata ccacctctc cctccctctt ctccctctgc
 721 acacactctg cagggggggg cagaagggaC Gttgttctg ttcccttaaat CGgggcttct
 781 gaaacagctt CGaagtctac aggaacacag acttcaggga catgaccttt atctctgggt
 841 atgCGaggtt gctattttct aaaatcaccc cctcccttat ttttactta agggacctat
 901 ttctaaattg tctgaggtca cccatcttc agataatcta cctacattc ctggatctta
 961 aatacaagg caggaggatt aggatcCGtt ttgaagaagc caaagttaga ggtCGtatt
 1021 ttggCGtgct acacctacag aatgagtga attagaggc agaaatagga gtCGgtagt
 1081 ttttggtggt tgcctgtcCG gggccccctg catgcaggct ggatggagg agaggggtg
 1141 ggggtggtCGg gggacCGCGt ttgaagtgg gtCGggccag ctgctgttct ccttaatac
 1201 gagaggggaa aaggaggag gagggagag attgaaagga ggaggggagg acCGggagg
 1261 gaggaagg gaggaggaac cagagCGgg aggCGCGgg agaggaggga gagtaactg
 1321 ccagccagc ttgCGtcacC GcttcagagC GgagaagagC Gagcagggga gagCGagacc
 1381 agttttaagg ggaagacCGg tgCGagtgag gcagcccCGa ggctctgctC Gccccacc
 1441 caatcctCGc ctcccttctg ctcaacttc ttctctgcc ctacactctc cccCGaaaaac
 1501 cccctattta gcaaaaggaa ggaggtcagg gaaCGctct cccctccct tccaaaaac
 1561 aaaaacagaa aaacctttt ccaggcCGgg gaaagcagga gggagagggt CGcCGggct
 1621 ggcC gag

FIGURE 1A

MSP Unmethylated 223 BP

GT TATGTTATGT TGTGTTGATG Forward UM 22 BP MT 56

T AAATCCACC AACACAATCA Reverse UM 21 BP MT 56

MSP Methylated 276 BP

TAC GTGTAGGGT CGATCG F M 19 BP MT 58

CGA AATATCTACG CTAAACG R M 20 BP MT 56

MSP External primers 287 BP

TATTT TTTGTAAAGA TAGTTTGTGAT EXT.F

TACAACTTCTAAAAATAACCC EXT.R

FIGURE 1B

Twist Promoter: Accn No. AC003986

Promoter Region analyzed: nts -51145 TO -51750

1 cattggactg ggtttccttc cacCGaagag tgaactctg cctctttCGa gcaacctcCG
 61 aggCGtagtc ctttgatgt tggggagCGt cagactgggt CGttgtagag gggaaaggag
 121 ggcccagaag ggCGagagag caggcCGga CGaaatcct cagccccCG CGCGccaC
 181 Gctttcagaa aCGccaggac ctccGGgctg ggcCGcCGCG gtttggcctt tggaaactcaa
 241 ggggttCGtct acctgacct tgggtggctc CGCGgttgac acttttcttg gcatgcccc
 301 ccaccccCGCG ccacaccacc ccccagccc cagcaatcca aatCGgcccc aCGgacctag
 361 agggctcttg ggCGagatga gacatcccc actgtgtaga agctgttgcc attgctgctg
 421 tcacagcca CGagatggg gcttccCG tggccaggac agtctctcc GacCGcttcc
 481 tgggctgCGc tagggttCGg ggcCGctgcc CGaCGctcc GgCGgggaag gaaatCGccc
 541 CGCGccCGc Gagggaagg GacCGggag gaaagggag ggCGgctagg aggCGgggtg
 601 aggggCGg CGcCGgGC aggtCGttt tgaatggttt gggaggCGa attgttagac
 661 ccCGaggaa ggaggtgga CGggggagg ggaactggaaa gCGgaaactt tcctataaaa
 721 cttCGaaaag tccctctcc tcaCGtcagg ccaatgacac tgctgcccc aaactttCG
 781 cctgcaCGa ggtataagag cctccaagtc tgcagctct Gcccaagtc cagacacctc
 841 gCGggctctg cagcacCGc acCGtttcca ggaggcctgg CGgggtgtgC GtcagcCGt
 901 tgggCGcttt cttttggga cctCGgggcc atccacacCG tccccctccc ctccCGcctc
 961 cctcccCGcc tccccCGCG GcctcccCG CGgaggtccc tccCGtcCGt cctcctgctc
 1021 tctcctcCG GgpcCGcat GccCGggcCG gCGcCGCGc Ggggggaaagc tggCGgggtg
 1081 aggCGccccCG ctcttctct ctgcccCGgg cCGCGaggc caCGCGtCGc CGctCGagag
 1141 atgcagg aCGtgtccag ctCGccagtc tCGCGgccc CGacacagcct gagcaacagc
 1201 gaggaagagc cagacCGgca gcagcCGcCG agCGgcaagC GCGggggaCG caagCGgCGc
 1261 aCGagcaggC GcaCGgCGgg CGCGgCGCG gggcccCGCG gagCGgggtg gggCGtCGga
 1321 ggCGgCGaCG agcCGggcag ccCGgcccag ggcaagCGCG gcaagaagtc tgCGggctgt
 1381 ggCGgCGgCG gCGgCGCGg CGgCGgCGc Ggcagcagca gCGgCGgCGg gagtCGcag
 1441 tcttaCGagg agctgcagac GcagCGggtc atggccaaCG tgCGggagCG ccagCGcacc
 1501 cagtCGctga aCGaggCGtt CGcCGcctg CGgaagatca tccccCGct gccctCGgac

 1561 aagctgagca agattcagac cctcaagctg gCGgccaggt acatCGactt cctctaccag
 1621 gtcccccaga gCGaCGagct ggaactccaa atggcaagct gcagctatgt ggctcaCGag
 1681 CGgctcagct aCGccttct Ggtctggagg atggaggggg cctggtccat gtcCGCGtcc
 1741 cac cagg CGgagcccc caccctctca gcagggcCGg agacctaggt aaggacCGCG

FIGURE 2A – FIGURE 2B

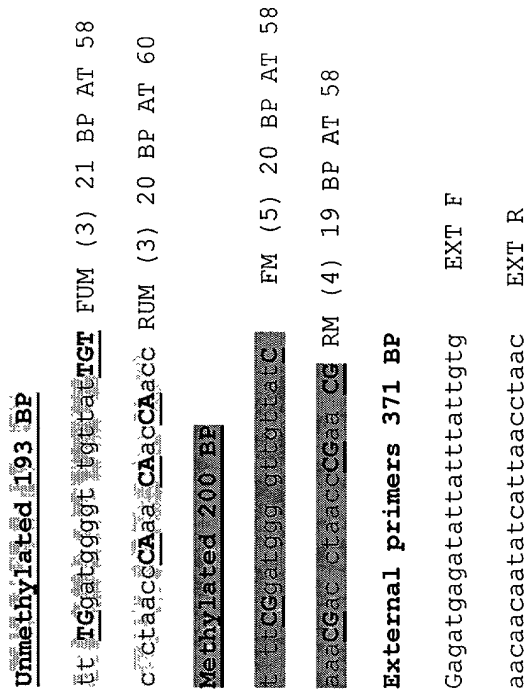


FIGURE 2C

RAR beta promoter, MSP primers

Promoter region analyzed: nt -196 to nt -357

ACCN NO. AF157483

1 gtgacagaag tagtaggaag tgagctgttc agaggcagga gggctctattc ttgtccaaa
61 gggggaccag aattcccat gCGagctgtt tgaggaactgg gatgCGcaga gCGGagCGa
121 gCGagagagg gtttgtctgg gcacCGtCGg gtaggatacC GgaacCGcatt CGgaaggcct
181 ttgtgcaagca tttacttggg aggagaactt gggaactttc tgggaacccc CGGcCGc
241 ggaatggaC Gagcaagcct ggaaaatgca attgaaacac agagcaccag ctctgaggaa
301 ctCGtcccaa gcccccatc tccacttcc taccactat ggggtcagCG cctgtgaggg atgtaaggc
361 tgccaggaca aatcatcagg gtaccactat ggggtcagCG cctgtgaggg atgtaaggc
421 tttttCGca gaagtattca gaagaat ggtgagcctt gtcacCGaga taagaactgt
481 gttattaata aagtcaccag gaatCGatgc caatactgtC Gactccagaa gtgctttgaa
541 gtgggaatgt ccaagaatc tgtcaggaaat gacaggaaca agaaaaagaa ggagacttCG
601 aagcaagaat gcacagagag ctatgaaatg acagctgagt tggacCGatct cacagagaag
661 atcCGaaaaag ctcaccagga aactttccct tcaactctgcc agctgggtaa atacaccaCG
721 aattccagtg ctgaccatCG agtcCGactg gacctgggccc tctgggacaa attcagtgaa
781 ctggccacca agtgcattat taagatCGtg gagtttgcta aaCGtctgcc tggtttcaact
841 ggcttgacca tCGcagacca aattaccctg ctgaaggcCG cctgacctgga catoctgatt
901 cttagaattt gcaccaggta taccacagaa caagacacca tgactttctc agaCGgacctt
961 accctaaatC Gaactcagat gcacaatgct gacaaatgct cctgacctgga catoctgatt
1021 acctttgcca accagctcct gcctttggaa atggatgaca cagaaacagg ccttctcagt
1081 gccatctgct taatctgtgg agacCGccag gaccttgagg aacCGacaaa agtagataag
1141 ctacaagaac cattgctgga agcactaaaa atttatatca gaaaaagaCG acccagcaag
1201 cctcacatgt ttccaaagat cttaatgaaa atcacagatc tCGtagcat cagtgcataa
1261 ggtgcagagC Gtgaattac cttgaaaaatg gaaattcctg gatcaatgcc acctctcatt
1321 caagaaatgc tggagaattc tgaaggacat gaacccttga cccaagtgc aagtgggaac
1381 acagcagagc acagtcctag catctcacc agctcagtg gaaacagtg ggtcagtcag
1441 tcaccactCG tgcaataaga ca

FIGURE 3A

Unmethylated 163 BP
ggatggg gatgtgagatgt FUM 21 BP AT 60
CAaccaaacca accaaaCAa RUM 21 BP AT 60
Methylated 142 BP
ga acCGGagCGa tCCagt FM(2) 19 BP AT 60
Gaccaaacca accGaaacCG RM(2) 19 BP AT 58
External primers 266 BP
gtaggagggtttattt tttgtt EXT (2) F
aattacattttccaaacttactc EXT 4 (2)

FIGURE 3B

Homo sapiens serine protease-like protease (nesl) mRNA, complete cds
(SEQ ID NO:94) AF024605

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1 accagcggca gaccacaggc agggcagagg cacgtctggg tcccctccct ccttcctatc
61 ggcgactccc agatcctggc catgagagct cgcacactcc acctctccgc cgcctctggc
121 gcccgggctc tggcgaagct gctgccgctg ctgatggcgc aactctgggc cgcagaggcg
181 gcgctgctcc ccaaaaacga cagcgcttg gacccgaag cctatggcgc cccgtgcgcg
241 cgcggtctgc agccctggca ggtctgctc tcaacggcc tctcgttcca ctgcgcgggt
301 gtcttggtgg accagagttg ggtgctgacg gcgcgcact gcggaacaa gccactgtgg
361 gctcgagtag gggatgatca cctgctgctt cttcagggcg agcagctccg ccggacgact
421 cgctctgttg tccatcccaa gtaccaccag ggctcaggcc ccactctgcc aaggcgaacg
481 gatgagcacg atctcatgtt gctaaagctg gccaggcccc tagtgccggg gccccgcgtc
541 cgggccctgc agcttcccta ccgctgtgct cagccccgag accagtgccg ggttgctggc
601 tggggcacca cggccgcccc gagagtgaag tacaacaagg gcctgacctg ctccagcatc
661 actatcctga gccctaaaga gtgtgaggtc ttctaccctg gcgtggtcac caacaacatg
721 atatgtgctg gactggaccg gggccaggac ccttgccaga gtgactctgg agggccccctg
781 gtctgtgacg agaccctcca aggcatectc tcgtggggtg ttaccctctg tggtctctgc
841 cagcatccag ctgtctacac ccagatctgc aaatacatgt cctggatcaa taaagtcata
901 cgtcccaact gatccagatg ctacgttcca gctgatccag atgttatgct cctgctgac
961 cagatgcccc gaggtcccat cgtccatcct ctccctccc agtcggctga actctccct
1021 tgtctgcaat gttcaaacct ctgcgcctct ccacacctct aaacatctcc cctctcacct
1081 cattccccca cctatcccca ttcttgctct gtaactgaagc tgaatgcag gaagtgggtg
1141 caaaggttta ttccagagaa gccaggaaagc cggatcatcac ccagcctctg agagcagtta
1201 ctgggggtcac ccaacctgac ttctctgccc actccccgct gtgtgacttt gggcaagcca
1261 agtgcctctc ctgaacctca gtttctctcat ctgcaaaaatg ggaacaatga cgtgcctacc
1321 tcttagacat gttgtgagga gactatgata taacatgtgt atgtaaatct tcatgtgatt
1381 gtcatgtaag gcttaacaca gtgggtgggtg agttctgact aaaggttacc tgttgcgtg
1441 aaaaaaaaaa aaaa

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FIGURE 4A

Sequence analyzed: nts +169 to +349
Exon 3 sequence

CGGAGAGGCG GCGCGCTGGCTG cccccaaaCG acaCGCGctt ggacCCCGaa ggcctatggCG cccCGTgCGC GCGCGgctCG
cagccctggc aggtctCGct cttcaaaCGgc cttCGcttcc actgCGCGgg tgctcctggg gaccagagtt ggtgctgaC GCGCGGaaC

FIGURE 4B

Unmethylated 128 BP

TTGTAGAGGT GTGttgttt Nes1 FUM 20 BP AT 56
CACGaat aaaaCAaaaa aCA Nes1 RUM 22 BP AT 56

Methylated 137 BP

ttCGaa gtttatggCG ttTC Nes 1 FM 20 BP AT 56
ttatttcCGaa ataCGCGaa Nes1 RM 20 BP AT 58

FIGURE 4C

HOX A5 Promoter 3' to 5' AC004080 (SEQ ID NO: 96)

16321 accaagagag actgggagag ggCGgcagag aagagagggg ggacCGagag cCGCGtcccc
16381 gCGgtCGCgt ggatttagaa aaaggctggc ttaccatga cttatgtgca gcttgCGcat
16441 ccagggttag atctggggtt gggCGgggCGg CGcCGgggtC GgctCGctct gCGcaactCGc
16501 ctgctCGctg ctggcagggg CGtcctctcC GgctcCGgaC GcGctgcca cccctctct
16561 gctgctgatg tgggtgctgc CGgCGtCGgc CGaggCGcCG ctggagtgc ttagggagt
16621 tttccCGcCG tgggtgctgt CGctgcCGgg CGagggggccc aCGcCGgagc agggcagCGg
16681 atCGggctga ggagagtCG tggacGtggc CGgctggctg tacctgggt CGgCGggCGc
16741 CGCGctggCG ctggcagCGt agctgCGggc GCGctctcCG gagccaaagt ggCGgagcc
16801 CGagCGgcCG aCGctgagat ccatgccatt gtagcCGtag cCGtacctgc CGgagtgc
16861 gctCGcCGag tccctgaatt gctCGctcaC Ggaactatga tctccataat tatgcaactg
16921 gtagtCGggg ccatttggat agCGaccCGca aaatgagttt acaaaataag agctCGttg
16981 ttttttgata tgtgtgcttg atttgtggt CGCGgtCGt tgtgCGtcta tagcaccct
17041 gcacaaatta tgatgaatta tggaaatgac tgggacatgt acttgggtcc ctctaCGta
17101 ggcacccaaa tatggggtac GacttCGaat caCGtgcctt tgttgtccag tCGtaaatcc
17161 tgcctgatga cctctagagg taaactCGtg cactaatagg ggagtgggt ggaggCGagg
17221 ggggtggCGC GCGCGccccCG ggCGCGtgcc CGCGccagt tgcCGcCGtt cagcCGgact
17281 CGagCGccac CCGctggagg cagggtcat CGccagctt CGacCGggg gctgcaagg
17341 cCGgggtCGa attgaggta cagcccat tggcaaaatt attgcatttc cctCGcagtt
17401 ccattaggat gtaccaattg ttaggcCGtc agctgcCGat CGCGCGcccCG gCGaggatgc
17461 agaggattgg

FIGURE 5A

Promoter region analyzed: nts -97 to nts -303

(SEQ ID NO:97)

ccaatcctct gcatactCG CGgCGCGCG atCGgcagct gaCGgcctaa caattggtac atcctaattg aactgCGagg gaaatgcaat
aatattgca taattggggttaactcaat tCGaccCG ccttgcagc ccCGgtCGg aagtggCG atgagcctg ccCGagCGg
gtggCGctCG agtcCGgctg aaCGGCGgca actggCGgCG ggaCGCGcc CGgggCGCG CGccaccctt cctCGctcc acccaactcc
cctattagt caCGagitta cctctagagg tcatcagcgagatttaCGa ctggacaaca aaagCGgtg attCGagtc ctCGccata
tttgggtgcttaCGtagag ggaacaaagt acatgtcca gtcatttcca taattcatca taaattgtgc aagggtgcta tagaCGcaca
aaCGaccCGG agccacaat caagcacaca tatcaaaaaaaa agct cttatttgt aaacCGatCGgatactg aaatgg
ccCGgactac cagttgcata attatggaga tcatagtCC GtatCGagc aattcaggga ctCGGCGagc atgcactCG gcaggttaCGg
ctaCGgctac aatggcatgg atctcagCGt CGgCGctCG ggctCGgcc actttggtct CGgagagCGG GCCCGagct aCGctgcccag
CGccagCGCG gCGccCGcCG agccCGgatacagagCG gCGcaCGtcca CGcactctcc ttagcCGGat

FIGURE 5B

Unmethylated 213 BP
tTGgtTGg aagttggtgTG FUM 18 BP AT 56
gtaTGtg attTGaagttT Gtatt
aataCAGcttCAaat caCAtac RUM 22 BP AT 56

Methylated 183 BP
tttagCGg gtggCGgtCG FM 18 BP AT 58
taCGtg attCGaagtc Gtat
ataC GacttCGaat caCGta RM 20 BP AT 56

FIGURE 5C

Sequencing 307 BP
attttggtta taatgggttg taat Hox A5 Seq. F 23 BP AT 56
ggag ggaattaagt atatgtt (SEQ ID NO:100)
aacatat acttaattcc ctcc Hox A5 Seq.R 21 BP AT 56
expression 249 BP
caattt tctgttccgtt atctc Hox Exp F 20 BP AT 60
ccaggta cagccagccg gc (SEQ ID NO:101)
gc cagatgggtt atctc Hox Exp R 18 BP AT 62

FIGURE 5D

Homo sapiens 14-3-3 sigma protein promoter and gene, complete cds.
 ACCESSION No. AF029081 (SEQ ID NO:102)

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1  ggatcccagc ctgccccctcc acttctctcc caagccagggt cccggccatgg gtgggttatg
61  ctcatgctgg caataacttga aacgggttta ttaatgtggg gtatttttgca caattttata
121  gacctctttt ctacatagtc ttttttaaat ggaaggagaa aatgtcagcc acattactgt
181  ctgtgtagtg ccagggtgaag ggttatcaga aggcctggtg gttttaataa gtttattcca
241  agagaccttc tggctggaat gagtgaagat gtgtgtgcat gtgtgtgtgt gttcatgtgt
301  gccctgtatg aatgtggctg gctcccagat cccctgggct gccccctgcc ccatccccctt
361  tgagtatcag aagcactctg agccaaaggg acagggggga cgtgcactgg tcacgagaaa
421  accctgggct cccactgggg ctctgcccag cctcctatct ttcttcttc tatggacttc
481  agacagccag tgtctgggga ctctgcccag ctacccccag ccctaccac cagccccccag
541  gtgaggcttc cagctggggc ctgcccagac aggtgagcc tgggctggtt gggctggggtg
601  atggctcttg ggagcggctg ccactctaca agccacacc cctcctctga gctctgaata
661  tgggacccag tgccaggagc tggaagacaa ggtgtttctg ccaaacggga cctccatcca
721  gagaaaagga agaaggtgca ggggtggcca agaggcaagt gaaggttggc ctgagtctgg
781  gccggaactc cagaggatgt ttctcctctg ctgggagctg tagtttctta tcaaaataga
841  tattgttcca ccattccccct ccttggccct tcaagtgggc tgaagccttg gaaagtgaca
901  taggaagtcc ccagatcttg ccttctcac tccagaggct agtggtcaca gacagctggg
961  aatggcagcc acagagggtc cctctggaga aacagcttca cccagcctc agggccctgg
1021  gcatactgac agtggccctg ggaggtgagg aagaagctgg ctagaggagg gggctcccac
1081  ctacctttta ttttagccag tattcttgtt tctgcttgtt aataaaactt cagtttataa
1141  gatttgcttt gctttggttt ggttttctt ttgctgaggg cccaactggg
1201  agccctctgt tctttcagac aaatttggtt ctttctctgg gagactgtga gaaggcaggc
1261  agccagtgta tctggctaca ttttccctca cctggctgga gctctgtccg ctggagggaag
1321  agcagagagg gctgcggctg agcccccatg ggcacgtgaa aagaggccat cctgtcccc
1381  ctttgtcccc tccaccttcc cctgctcag gggcttggag accccaaatt cttcttccct
1441  actgcctttc cactccgac cccaatgagt gccagctaa gaaaatgttt gagacagtag
1501  attccagttt gagagccgga gcttccctgg ctaccacctc caacctgggc accagggccc
1561  agccagacaa ctcataaac tggtccacct ctctgtgtac tccctcagga ggacacctgt

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FIGURE 6A

1621 caggattttt ccatctcttg cacagcctga gggagagctaa caggcctctt tgcagagggt
 1681 tagctggtta gaccgtttct tccctgtcgg ccagcactgc ccgtctccct ccacacacca
 1741 tctcatctc atcgcatgcc tgcaccaacc catggagccc gtccatctgt ctggtgtgtg
 1801 gtgcggtgtg tgtgctggtg gtggtagggt ctccaggac tccccgctaa gcagaaagat
 1861 cgggatatag ggcaaggcta aaagcccagc cccatttgg actgaggaaag tacgttcgcg
 1921 cagagcagct ctccagctgg aagaggaggt ggagggtgag gctggggaga ggaaggcga
 1981 cctgcccctga ggtgcttggg tctgtgctgg tgggtccctg gtatgcaggg gccaccggtc
 2041 actaacactc ttatgtcctg gctttctgtc cccgtgagc ttctctcac ccgcccgttt
 2101 tctctcctgc ttcatgtcct gctgcctaag ccttggccct tctctgggc agaggcaggt
 2161 gctgtggcag cactctccc caccaccggg cccctcagg ccgctccct cctcccaggc
 2221 ctgtctaaccc tctctcttct ccttcttgc tgtctgcgg gggatctcca gtgtgtcgg
 2281 gggcttaagg acctcctgag gaccgtgct ctctgctct ccaggaaatgg cctgggggga
 2341 gccaggcacc cggcacctcc acctgctcc cctgtggccc atctgccacc atctgtgct
 2401 acagggtctg cccccagcc tgcggcct gtgtgtctc taggacccca tagggggcag
 2461 gggctggcct ctttgcccca ttcccgctcc atgcccggca gagtgtagaa agccataacg
 2521 cagcagacca tcagcacaat aatgtgactc tagctgata tgctccctct ctctccact
 2581 gacttcccct tcccgattt gtgaggtgtc aagactagga atctggcctt agagcctgcc
 2641 cctccacccc ctcatatcag gcatagccat agtcaagccc agcaggtttc ctcaggagct
 2701 gtctgggggt ttgatgggtg atgacgctgc tgaacaagt ttgtgactgt tctaagcaca
 2761 actgggcttg tactgttccc acggcctgtc cactcccac ccccaacctt ccaccagagt
 2821 aggtaggatg tagggagggt gcgtgcgccc ttgtctctag gcactgaggg accaagctag
 2881 ccgtgcacag ccccatcac ttcaggggcg taaaggaaag agctgagcca aggaaaaatca
 2941 gctgagccca gggctggggg ctgcttctct gctatcctgt acctttttt ttttaacca
 3001 aaataaagat tcccctctc ttgccatacc attggtgtgc tgggtggcgc ttactttgg
 3061 gggccaggga tgggacctgc agtgggctgt tggacatat ggctccccct cgtcccagc
 3121 ttcttccag ctggccagtgt ctgctctgga gatttacaag cacaacgaag ccaggaggga
 3181 cacaggaaaa gtggctgaca tcttttccac tctgcccctc cagaactctt ggtctcaatt
 3241 ccagacacca cccagcctta gctgacctct ggattctgat aggtcccagt gcaggctgag
 3301 acagagggtt taactccagt ttgggactgc catacccatg aactgagccc agcccagggt
 3361 aacgatctca tggaaacttc tctctcccca gttgctgcac tacatcaaga tacacacatg
 3421 tgcatacact gtactatggg ctaaaaaaat acgtaccgct accgttcagc aaggccttgc

FIGURE 6B

3481 cgagtcgccg gccattttc tcattttaac ctgtgaggag gatgatgtca gcctttttac
3541 agatgaggga actgagactc aaggaagaaa caggagctgc ccaaggtcac ccagctggca
3601 aagcagcaaa tcccagatcg gaacctgac tctgccccga gctctgagcc atctgcacta
3661 cccaagggaat gaatacagcg gtgggaggat gagatcttgg agaaacccta aaattagaga
3721 atgtcatagc cagtagaggg cttagagttg atctgggcca gcctccttgt tttactgatg
3781 gagaaattga agcccagagg caggaaggga cctgccccag gccttataac agagctggga
3841 tgcagtccca cactctgacc tcattccatt ctctctccat aaattctgca ctgtctctag
3901 actggactgg tttagatgtg ggatactcta aacagcagtg ccttcaagag aaaaagaatc
3961 agaactacga atcacttaaa agtaatgtaa gctactctgg gcacactgcc tatggggtcg
4021 ccctgctcca caaggagcca caaaaataat taaaataatt taatatccct tcccaaaggt
4081 aaccagtaaa gtaagctctt ggctaggtaa ctggactott gttcacaaact agccagtggg
4141 aaaagggtgct agagcttctt ctggccacct gtttaatttg atcattccaa gacagaaaaca
4201 ttcttttagga agttctttct agaactctacc tgggtctcct ccactgcta tcagagccct
4261 gtctctgtc ctcaagtggag gttagagagca aatggttgct gctttcttca tcacaacct
4321 tcaagacctt ttattaccag ctaagaaggga ttggttgact atgggccaga gccctgagc
4381 ctgctggtag aatggatgct gtacagagg gtggggaggt agcaggcaga atgaggaaaag
4441 cccctttgag ctgcaacccc agctcctgtc ctgctgactc agacagctga ctgtggagct
4501 ccatgccctg ccagggccctg ctgcctcctg cccgtctgag ctctgaact tgggaaatgg
4561 aggccagag gcaaaggag gtacctgaga caggaactga gtcaggatca acagccaga
4621 gcgggcagga ggtatcagg agcctggctc ccagatgcac ccctgagctc cagcaggga
4681 ggagtaggaa tgaaggggct tccttgccct tgctcatggc tatgctggag gcgtgaacca
4741 ccaccaggtc ctctggctta agtggcgga agcaaatggc ccctccctgg actcaggctc
4801 caaagtctct gggcctgctt tccaggttcc cagtgctcct ggatctccag ctttccccag
4861 gacttggga agcccgggt ggatgactag tacaatgaa ggcccctgag gttccaggac
4921 ctgctgaggt cacaggaata tcttagatca agcttgcca accacggcc cacaggctgc
4981 atgtggccca gaatggcttt gaatgcagcc caacacaaat tagtaaaact tcttaaaaca
5041 ttatgagatt tttttgcaaa tttttttttt ttttttagct catcagttat tggtagtgtt
5101 ggtatatatt atgtgtggcc caagacaatt ctccaatgt gcccagggga agcaaaaaga
5161 ttggacacgc ctgtcctaga tggagaggaa ggaggcagtg ctgagcacat ctggccattc

FIGURE 6C

5221 atccatctgg agagagaagg ctatgggcaa actgtcttct ctccccgtga gacaccagc
5281 tgggaaggtc tggcctttgg taagtcttgg cttggggtcc ttctcattht cacagaacct
5341 aactctatgt tagtgctttg tgagtatatg ttgatacataa taaagttgac gggatttttt
5401 cacatgataa taatagttgt catctggccg ggcattggtg cttatgacct taatttcagc
5461 actttggaag gctgaggcag gtggatcact tgaggtcagc tggtcgagac cagcctggcc
5521 aacatggtga aaccacatct ctacttaaaa aaaaaaaataa taaaaaaatt agctgggtgt
5581 ggtgtgtcac cttgtgaatc ccagctactc gggaggctga ggcaggagaa tcacttgaac
5641 ccaggagggtg gaggttgtag tgagctgaga ttgtgccact acactccagc ctgggtgaca
5701 agagcgaac tccgtctcaa aaaaaagaa aataataata ataatagttg ccatccattc
5761 tactgtgctt tccattaact cgtgtaatcc tcacaagtcc cattttatag ttacaggaaac
5821 tgagggtcac agagcttaaa tcacttggcc aaggccaaa acagctataa gaattacatt
5881 taggcagtct gattccaaag atactagtct attctgtatc tcatagacaa acaatacata
5941 ttoacttttt tgtgttgtt ttgttttgg acggagtctt gctctgtcac ccagggtgga
6001 gtgcagtggc gccatctcgg ctccactgaa cgtccgctc ccgggttcaa gctattctcc
6061 tgcctcagcc tccgagtag ctgggactac agctctccaa aggttttctc gaattctctga
6121 ttgtattttt agtagagaca ggtttttctt ggtttagcca gaattgtctc gatctcctga
6181 ccttgtgac caccacctc agctctccaa agctctccaa aggttttctc gatctcctga
6241 gtccgacctt tattcactat ttataaattg gagagaataa gaaaatcaaa agggccaggt
6301 gtagtgactc acacctgtaa tcccagcact ttgggaagcc aaggcaggag gattgcttga
6361 acccagaagt tcgagaccag cctgggcaac atggtgagac cctgtctcta caaaaaaac
6421 aaaaattagc tgggcgttgt agactgcagt gagctgtgat cataccactg tacttcagcc
6481 acctgaggcc aaggagggtg agactgcagt gagctgtgat cataccactg tacttcagcc
6541 tggacatcag agtaagacc tctctctaaa agggaaattg agaagaaaga aaatcaaaagg
6601 gaagcaaaat cactcactct cactacctca agataccctc tagaagttag tatttttagt
6661 tggttcttat tgttttctgt gtcagttctc tgatttgagc aaaatctttg ggacgtcaaa
6721 cttaaaatcc ctttacttc cttggaacc ctgtagcatt agcccagaca tgtccctact
6781 cctccttctg gcaaagagaa ggtctctgtc ttgtgtcccc agagtctctg cctaagcctc
6841 cctccaggag ggaagatgag tgttcagaca ctccagatag ctgggggaga cacaggcctg
6901 tgaatttatt ctggctcaac tattaggtcg gcagaatccc agtgaaggga gcctacctc
6961 tgagcccccatt ctaagctttg gctatgggtg ggcagataa gcaggaaatcc atccctatag

FIGURE 6D

7021 gctcaatgcc aacaccctta ggtgaaactc ttgatgaaac ttgaggccag ggctccggca
7081 agcagggaag aaacgttggc aacagaggtc tccatctctg aggactctgc cagggttcag
7141 agatggggca atggtcaaaa ggaaggaaac gccaggcac agtggctcat gccataatc
7201 ccagcacttt gggaggctga ggcaggagga tcgcttgagc ccaggagttt gagacctgcc
7261 tgggcaatgt agtgagatct gctctctatt taaaaaaaaa aaaaaggaaa gaacaagtaa
7321 actcttgaga aacaggctgg gggaggcatc acgtagtggg aattgctgcc ccataaaaca
7381 gaatgggtatg tgtcactgcc acctcccttt ctacgtcttc tctctcccca ggttgctagc
7441 gtccccctgg gggatcaaac tggactgctt ccagcctca gacagagagc agtctgagtc
7501 aggcaggaaa gtgggacagc cggggagctg gaccccaacc tctgtgagcc ccgctggtac
7561 ctgatggcat gtggcttggg gagggcaggt gacctggcgt ggaggccagc agggtaaatc
7621 ctcaaaacaag tggcaacagg ccaccaactt gaaagggaag attgtgtagt gatgggaaat
7681 gtgtccaaca aacctactgg gtgactaatt acaaggctg gactgagct tctgggagct
7741 cttgttaaac acttcattaa gcggcactct gaaagctgcc acctgcgcat tctgggagct
7801 cagaggggac cctgaggggg atgaggcctt ggaggatgga accatcttca ggtagactga
7861 gaaggagcct ggtctcactt tccaaacaca gtctggagct cataggtcag aggcctcaat
7921 gggagaaaaa ctaagggaag aggtgacaga aaggagtctt agggaattgg tggctatgtg
7981 actttgagca aatctcacc cttctgaga cttagtgttc ccactctat ggtcctgtgt
8041 gtgtcacaga gacatggtgg gattataatt cgatcgtgat atgaaagtgc ttgggaaact
8101 ccatggccct acctaaacat gattatcctt cactgaacc aagggggaa gttacctggc
8161 aggattagga accccatcct cctgaacctt tatgggctct gtcgaggctg aagcagccag
8221 gggctaaagc cagtccttag cccctggaag ggcactgtga aagtggatct gatttgagaa
8281 gccgtttcct gatgtgggca gccatgtgat gccagccccg aacaagaggg ggcagcctgg
8341 agcctggaaa ggtgccagt gccgtgggc caggtgggc ccacgcccag atttctctg ctgactgttc
8401 tgatgattca cccccacat ccagcctttt tacctttact gcagagccgg aaagggtgtg
8461 gggaaagagag gagaggagg caggtcttgg gccctgggtcc cgccccctgc tctccccac
8521 ccttctctgg gcctggccac ccagccaaaa ggcaggccaa gagcaggaga gacacagagt
8581 ccggcattgg tccaggcag cagttagccc gccgcccgc ttgtgtgcc cagagccatg
8641 gagagagcca gtctgatcca gaaggccaa ctggcagagc aggccgaac ctatgaggac
8701 atggcagcct tcatgaaagg cgccgtggag aagggcgagg agctctctg cgaagagcga

FIGURE 6E

8761 aacctgtctt cagtagccta taagaacgtg gtggcgccgc agagggtgc ctggagggtg
8821 ctgtccagta ttgagcagaa aagcaacgag gagggctcgg aggagaaggg gcccgagggtg
8881 cgtgagtacc gggagaaggt ggagactgag ctccaggcgg tgtgcgacac cgtgctgggc
8941 ctgtctggaca gccacctcat caaggaggcc ggggacgccc agagccgggt ctctacctg
9001 aagatgaagg gtgactacta ccgctacctg gccgaggtgg ccaccggtga cgacaagaag
9061 cgcatacttg actcagcccc ccaaccccat ccgctgggc gtagagggca tggacatcag caagaaggag
9121 atgccgcccc gagatcgcca acagccccga gaggccatc tctctggcca agaccattt cgacgaggcc
9181 gagatcgcca acagccccga gaggccatc tctctggcca agaccattt cgacgaggcc
9241 atggctgac tgcacacct tgcacacct cagcaggagc tctacaaa acagaccct catcatgcag
9301 ctgtctgcag acaacctgac actgtggac ggcgacaacg ccggggaaga gggggcgag
9361 gctccccagg agccccagag ctgagtgtg ccgcccacg cccgcccctg cccctccag
9421 tccccaccc tgcgagagg actagtatg ggtgggagg ccacccctt tcccctaggc
9481 gctgttcttg ctccaaagg ctccgtggag agggactggc agagctgagg ccacctggg
9541 ctggggatcc cactctctt gcagctgtg agcgaccta accactggtc atgccccac
9601 cctgtctct cgcacccgt tctcccgac ccaggacca ggctactct cccctctct
9661 tgcctccctc ctgcccctgc tgcctctgat cgtaggaatt gaggagtgtc ccgcttgtg
9721 gctgagaact ggacagtggc aggggctgga gatgggtgtg tgtgtgtgtg tgtgtgtgtg
9781 tgtgtgcgcg cgcgccagt caagaccgag actgagggaa agcatgtctg ctgggtgtga
9841 ccatgtttcc tctcaataaa gtccccctgt gacactcctc ctgtctctc tccagttctt
9901 ggcgatgggc tgggagtgg actggaatct gacttagaga cctgacttt ggacctctga
9961 gttaggggcc tgaactcct aggtggctca gtggcccgca cgcaagactt tgagtcagg
10021 tgaggccggg gtcc

FIGURE 6F

	H.sapiens Wilms tumor (WT1) gene promoter.	ACCESSION	No.	X74840
(SEQ ID NO:103)				
1	agcttgacgc cccagccgg gccagccagg tacaggaggc cggactgcaa ccggttgctt			
61	ccctccgctc gcgcctggcc gtcccacgct ggccgctgc tgcgctcc tggcgccct			
121	gggattttat acgcacctct gaaacacgct ccgctccggc ccccggttct tctccttgcc			
181	taggggttgt ttcccaatag atactgactc cttagaaga tccaaaaacc aaacccaaac			
241	acccctacc cgcctccaac acctgctctg gggcgcgagg gctgccaaac agagactaga			
301	cgaaggaggt cagatttagc gaantcttcg agctcccaaa gattcgaaca ctaactcgcg			
361	cccgtggccc gatggagggt ctccctactc cactccttgg tccccttaac tggcttcggc			
421	ctcctgttca atcactgagc aaccagaatg gtatcctcga ccagggccac aggcagtgtt			
481	cggcggagtg gctccaggag ttaccgcctc ctgcccgggt tcgtatccaa accctccct			
541	tcacccctcc tcccctccct ggccgcccag atgctccggc cggaaatatac gcaggctttg			
601	ggcgtttgccc caagggtttt ctccctcctt aaactagccg ctgttttccc ggccttaaccg			
661	tagaagaatt agatattcct cactggaaag ggaactaaag tgctgctgac tccaatttta			
721	gtaggcggc aaccgcttcc gcctggcgca aacctcacca agtaaacac tactagccga			
781	tcgaaatagc cccggcttat aactggtgca actcccgcc acccaactga gggacgttcg			
841	ctttcagtc cgacctctgg aaccacaaa ggccacactc ttccccagt gaccccaaga			
901	tcattggccc tcccctaccc gacagttcta gaagcaagag ccagactcaa gggtgcaag			
961	caagggtata cgcttctttg aagcttgact ccaaccactc tgcgctttcc tgaagtcc			
1021	gcctctttgg agcctacctg cccctccctc caaacactc tttagatta acaaccat			
1081	ctctactccc accgcattcg accctgccc gactcactgc ttacctgaac ggacttcca			
1141	gtgagacgag gctccacac tggcgaaggc caagaagggg aggtgggggg aggtttgtgc			
1201	cacacgggcc agctgagagc gcgtgttggg ttgaagagga ggtgtctcc gagaggacg			
1261	ctccctcgga cccgcccctc cccagctgc gagggcgccc ccaaggagca gcgcgcgtg			
1321	cctggccggg cttgggctgc tgagtgaatg gagcgccga gcctcctggc tcctcctctt			
1381	ccccggccg cggccccctc ttatttgagc ttggggaagc tgaggggcagc caggcagctg			

FIGURE 7A

1441 gggttaaggag ttcaaggcag cgccacacc cgggggctct cggaacccg accgcctgtc
 1501 cgctccccc ctccccccc tccctccac ctactcatt accacccac ccaccagag
 1561 cgggagcgc agcccaggc cccgggccc gccgtctct ccccgcatc ctggacttcc
 1621 tcttgctga ggaaccggct tccacgtgt tcccgagcc ggcgtctcag cacacgtcc
 1681 gctccgggc tgggtgccta cagcagccag agcagcagg agtccgggac ccgggcggca
 1741 tctgggcca gttaggcgc cccaggcca gcgctgaac tctccaggc cggaggagcc
 1801 ggggggcgt cgggtctgag ctcagcaaa tgggtccga cgtgcgggac ctgaacgcg
 1861 tgggtccgc cgtccctcc ctgggtggc gcggcggtg tgcctgcct gtgagcggc
 1921 cggcgagtg ggcgcggtg ctggacttg cgcgccggg cgcttcggc tacgggtcgt
 1981 tgggcggccc cgcgcgcca cggctcgc cgccacccc gccgcggcg cctcactct
 2041 tcatcaaaa gagccgagc tggggcggc cggagccga cggaggagc tgcctgagc
 2101 ccttactgt ccacttttc ggcagttca ctggcacagc cggagcctgt cgctacggc
 2161 ccttcggtc tctccgccc agccaggcgt cctccggcca ggcaggatg ttctctaag
 2221 cgcctacct gccagctgc ctcgagacc agcccgctat tcgcaatcag ggtaagtagg
 2281 ccggggagc ccccta

FIGURE 7B

Estrogen Receptor (ER): Homo sapiens estrogen receptor beta gene, promoter region and partial cds (SEQ ID NO:104) Accession Number AF191544

1 actatagggc aCGCGtggtC GaCGGCCCG gctggtattg atagatgcat tttcttcacc
61 ctccacctatc tttttctgcc tggttgctta tgggtgaaat tccttcata CGgttttccat
121 ttccagagat atcttgtaa caagtata ccacaaatg aagctgattt tttttttttt
181 ttttttttga gacagagtct CGctctgtCG ccaggctgg aatgcagtgg CGCGatcttg
241 gctcaactgca acctCGcct cccatgttca agCGattctc ctgcctcagc ctccatgagta
301 gctgggatta ctggcatgtg ccacCGCGtc cagccaattt ttgtattttt agtagagaCG
361 aggtttcacc atgttggtca ggtgggtctc aaactcctga cctCGtgatc cacctgcctc
421 ggcctcccaa agtgctgaga ttatagggt gagccaccat gcctggccat gaagctgatt
481 tttttaaacc atcatttaac attttctca taagtggtgca aggaggaaga gcatatgggg
541 actgggtact ttgagagacc ccaggacagg agacagggag gctgagattg gcatgtgtgc
601 tgctgcagtt atttgccagC Gacacactct ttcCGtccaa actaacttct ctgcctcaag
661 gacagggaga ctctgccttt caactgaga gaaaccagga ctctcagctt taatgaaaaat
721 tggacttagg gtggggcagt ggagactttt cacagctatt gtttagctga tgaagcagat
781 gcttctccat ctttggagcc tgtcttcatt acctgtggac ctcatcttta tcaaccaga
841 gcacacttgC Gtctctctat ttgggtctaa caccaaacag ctgaggctgg tactgtaaaa
901 ctttccctcc aaatgcccc cctCGcttctc ctctattaga gatctggatc acaacctca
961 aaacacatgt ccttatgcc acctgagtag atggtttgat gattaattag gcacagatgt
1021 gacactgggg ggtctcaca atggcctgtg ggtcacatgc tactttcctt ttcattttca
1081 tcagcaacag ctgccttaaa gccagttaag actgtggtcc tagtctCGca ccctggggct
1141 cctgctgggg tgggtgagg gaaaccccc ttaagctggg ggaactgggg ctgccaccag
1201 ggggCGCGag gggccttCGc CGagaagag ggggtggcag gtgcctccag CGgagaagg
1261 CGCGtggtC Ggaggcacag gtctcccCGg tgccactca agtgagttCG aggaagtacc
1321 tgggatcttt gatctaaCGC Gaaaggcctt cccagtacc tottgaggc tgagaacca
1381 ctccctccac ctctagtca CGgcttttgc actccaggc CGagggttaC Gttgtgct
1441 ggggatttga caaaccaaa gcctctctgg tttcaccact ggtccttag aatcagacat
1501 ctgttctgaa tgacacttat gtgagtcagg ggtgaggagC GtgatectCG aagtgtggtc
1561 ccagactgg ctgtatcagt gtCGgcatcc cccaggacct ggttgaaat gcatattctc
1621 aggccttact ccagacctct taaatctgag actgggggctg CGgggagCGc catctgtgCG

FIGURE 8A

1681 ccactatcct tgtgggtgga ccaggagtCG gttCGaggggt gctcccactt agaggtcaCG
 1741 CGCGCGtCG ggttctctg agaCGCG gctccctggc tCGgtcaCGt gggctcaggc
 1801 actactcccc tctaccctcc tctCGgtctt taaaaggaag aaggggctta tCGttaagtC
 1861 Gcttgtgatc ttttcagttt ctcagctgc tggcttcttgc tcttgaaact tgcaggggCGa
 1921 gaggcagttg caagCGCGga ggtgCGaga aataactgcc tcttgaaact tgcaggggCGa
 1981 agagcagCG gCGaCGctg ggcCGgggag ggaccaccCG agctgCGaCG ggtctgggg
 2041 ctgCGgggca gggctggCGC CCGagcctg agctgcagga ggtgCGctCG ctttcctcaa
 2101 caggtggCGG CGgggCGCGC GCGggagac cccctaat gCGgaaag cACgttCG
 2161 Gattttagag aaggcaaggc CGgtgtgttt atctgcaagc cattatactt gccaCGaat
 2221 ctttgagaac attataatga ctttctgctt tcttcttgc aggtgttttc tcagctgtta
 2281 tctcaagac gatataaa aaactcacca tctagcctta attctccttc ctcctacaac
 2341 tgcagtcagt ccatcttacc cctggagcaC Ggtccatat acataccttc ctcctatgta
 2401 gacagccacc atgaatatcc agccatgaca tcttatagcc ctgtgtgtgat gaattacagc
 2461 attcccagca atgtcactaa cttggaaggt gggcc



FIGURE 8B

Unmethylated 288 BP
G ggTgTtTtTg agatTGtTGg FUM 21 BP AT 60
TG agttgTGaTG ggTTTTg
cCaAaAaCc CAtCACaact CA RUM 20 BP AT 58
Methylated 181 BP
agagtaggCG gCGagCG FM 18 BP AT 60
CGggaaaag taCGtgttCG t
a CGaacaCGta cttttCG RM 20 BP AT 60

FIGURE 8C

FIGURE 9A

HIN-1 SEQUENCING PRIMERS

Forward: 5'  3', 23 bp, 56 (SEQ ID NO:111)
Reverse: 5' GTGGtttTGtTtTGtATGtTtGGTG 3' (SEQ ID NO:112)
Reverse: 5'  3' 60, 26 bp (SEQ ID NO:113)

HIN-1 External primers 209 BP (-213 to -39)

Forward (2): 5'-GTTTGTTAAGAGGAAGTTT- 3' (SEQ ID NO:114)
Reverse: 5'-CACCGAAACATACAAAACAAACCAC- 3' (SEQ ID NO:115)

Primers for Methylated HIN-1:

Forward: 5'-GGTACCGGTTTATGCTTGGT-3', 24 bp, 60 (SEQ ID NO:116)
Reverse: 5'-AAGTCTTATACCGATCGT-3', 22 bp, 62 (SEQ ID NO:117)

Primers for Unmethylated HIN-1:

Forward: 5'-GGTATGGGTTTATGCTTGGT-3', 24 bp, 62 (SEQ ID NO:118)
Reverse: 5'-CAAAAGTCTTATACCGATCGT-3', 25 bp, 68 (SEQ ID NO:119)

FIGURE 9B

Nucleotide sequence of RASSF1A promoter (SEQ ID NO:121)

17701 tcagcaaacC Ggaccaggag ggccagggcC Ggatgtgggg accctcttcc tctagcacag
17761 taaagctggc ctccagaaac aCGgggtatct cCGCGtggtg ctttgCGgtC GCGtCGttg
17821 tggcCGtccCG ggggtgggtg tgaggagggg aCGaaggagg gaaggaagg caaggCGggg
17881 ggggctctgC GagagCGGc ccagcccCGc cttCGggccc cacagtccct gcaccaggt
17941 ttccattgCG CGgctctcct cagctccttc cCGCGccca gtctggatcc tgggggaggC
18001 GctgaagtCG gggccCGccc tgtggcccCG ccCGggccCG GcttgctagC Gcccaagcc
18061 agCGaagcaC GggcccaacC GggccatgtC Gggggagcct gagctcattg agctgCGggga
18121 gctgggaccc GctggggCGG ctgggaaggG CCGGagccCGg ctggagCGtg ccaaCGCGcct
18181 GCGcatCGCG CGgggcacCG CGtgcaacc cacaCGgcag ctggtccctg gcCGtggcc
18241 CCGcttcag ccCGCGgggc cCGcaCGca cactgggtGC Gacctctgtg gCGacttcat
18301 ctggggCGtC GtGCGcaag Gcttgagtg CGCGCGtgag tagtggcccC GCGCGcctac
18361 GagagCGgaa ggggcagcca aggggagCG cagtCGcCGC GggtcaagtC GCGgcagagg
18421 ggggtCGgCGg ggacagctcc CGaggactag gtcCGttact ttCGccccc CGctgaagag
18481 tgCGCGaaaa tggtttatcc cttgtCGcac tccactCGta tctgggccac agatgagcag
18541 aggtggctgc ttatatgtaa aaataCGctg attttaagtt tcttatcttt aaaatgcctt

FIGURE 10A

SEQUENCING PRIMERS FOR RASSF1A

External Primers 294 BP

gggagtttgagtttattgagt RASSF1 ext. F

acccottaactaccccttc RASSF1 ext. R

Internal MSP Methylated 160 BP

gttggtattc GttgggCGC RASSF1 FM (2)
GcaccacGtataCGtaacG RASSF1 RM

Internal MSP Unmethylated 180 BP

ggtTgtattTGgttgagTG RASSF1 FUM
ctacaaacctttaCacacAaCA RASSF1 RUM

FIGURE 10B

Multiplex Methylation-Specific PCR

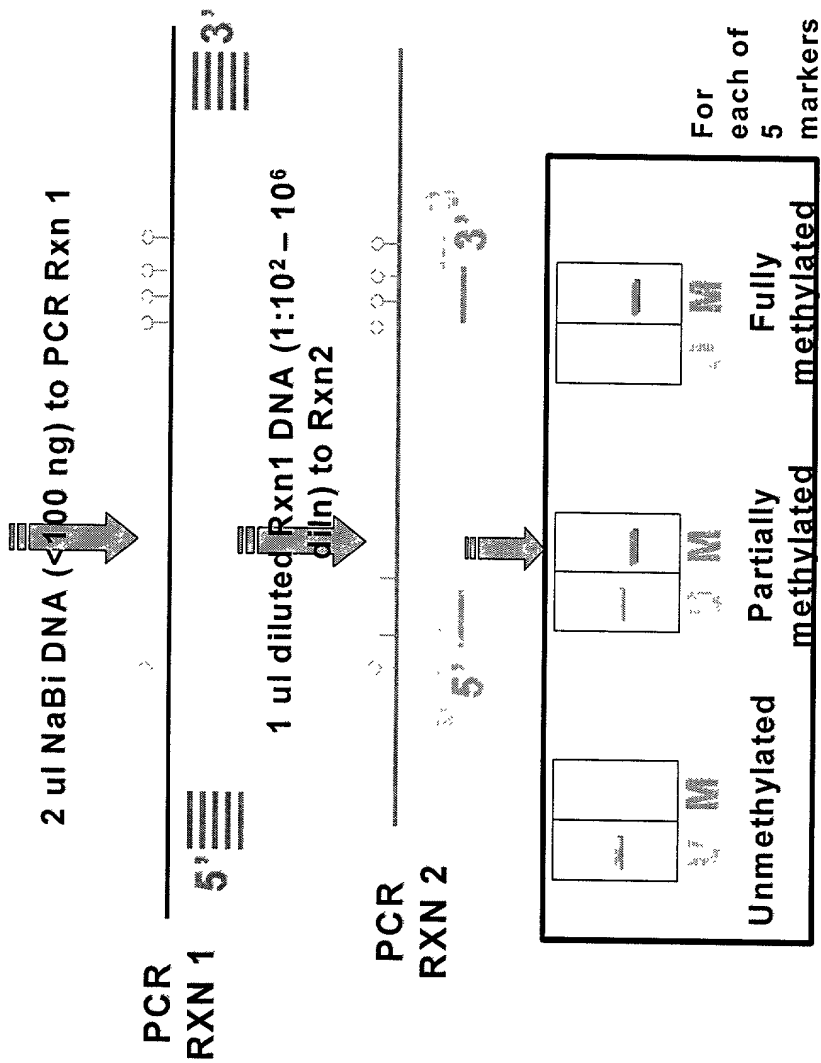


FIGURE 11